

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of producing a photovoltaic panel, comprising the steps of:
producing a light-transmitting, photovoltaic-element holding member which holds, along a reference surface, a plurality of photovoltaic elements each of which includes a P-type layer and an N-type layer, and

forming, on one of opposite sides of the photovoltaic-element holding member, a first electrode which is electrically connected to the respective P-type layers of the photovoltaic elements, and a second electrode which is electrically connected to the respective N-type layers of the photovoltaic elements,

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wherein the step of producing comprises
forming a light-transmitting layer of a light-transmitting material before curing,
embedding at least respective portions of the photovoltaic elements in the light-
transmitting layer, and
curing the light-transmitting layer in a state in which said at least respective portions
of the photovoltaic elements are embedded in the light-transmitting layer, and
wherein the step of embedding comprises
temporarily holding, with a temporarily-holding surface of a temporarily-holding
member, the photovoltaic elements, and
moving the temporarily-holding member holding the photovoltaic elements, toward
the light-transmitting layer, till the respective portions of the photovoltaic elements are
embedded in the light-transmitting layer.

2-4. (Canceled)

5. (Currently Amended) A method according to claim 14, wherein the step of moving comprises pressing, in a state in which the photovoltaic elements contact the light-transmitting layer, the ~~temporarily holding~~ temporarily-holding member and the light-transmitting layer against each other.

6. (Currently Amended) A method ~~according to claim 3, of producing a photovoltaic panel, comprising the steps of:~~

producing a light-transmitting, photovoltaic-element holding member which holds, along a reference surface, a plurality of photovoltaic elements each of which includes a P-type layer and an N-type layer, and

forming, on one of opposite sides of the photovoltaic-element holding member, a first electrode which is electrically connected to the respective P-type layers of the photovoltaic elements, and a second electrode which is electrically connected to the respective N-type layers of the photovoltaic elements,

wherein the step of producing comprises

forming a light-transmitting layer of a first light-transmitting material before curing,

embedding at least respective portions of the photovoltaic elements in the light-transmitting layer, and

curing the light-transmitting layer in a state in which said at least respective portions of the photovoltaic elements are embedded in the light-transmitting layer, and

wherein the step of forming the light-transmitting layer comprises

preparing a container including a bottom portion and a frame portion projecting from an outer periphery of the bottom portion, and

supplying the first light-transmitting material to a the container and thereby forming the light-transmitting layer.

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7. (Currently Amended) A method ~~according to claim 1, of producing a~~
photovoltaic panel, comprising the steps of:

producing a light-transmitting, photovoltaic-element holding member which
holds, along a reference surface, a plurality of photovoltaic elements each of which includes a
P-type layer and an N-type layer, and

forming, on one of opposite sides of the photovoltaic-element holding
member, a first electrode which is electrically connected to the respective P-type layers of the
photovoltaic elements, and a second electrode which is electrically connected to the
respective N-type layers of the photovoltaic elements,

wherein the step of producing comprises

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Cont'd arranging, according to a ~~predetermined~~-rule, a plurality of transparent spherical
members, along a reference plane, and

holding, with the arranged spherical members, the photovoltaic elements, such that
the photovoltaic elements are positioned on the spherical members.

8. (Currently Amended) A method according to claim 41, wherein the
temporarily-holding member is formed of an elastic material, and wherein the step of
temporarily holding comprises stretching the temporarily-holding member holding the
photovoltaic elements, to change a space between each pair of adjacent photovoltaic elements
of said plurality of photovoltaic elements.

9. (Currently Amended) A photovoltaic panel, comprising:
a plurality of transparent spherical members which are arranged, according to
a rule, along a reference plane;

a plurality of photovoltaic elements each of which includes a P-type layer and
an N-type layer and which are held by the arranged spherical members, such that the
photovoltaic elements are positioned on the spherical members;

a first electrode which is provided on one of opposite sides of a first plane intersecting the photovoltaic elements and which is electrically connected to the respective P-type layers of the photovoltaic elements;

a second electrode which is provided on said one of the opposite sides of the first plane and which is electrically connected to the respective N-type layers of the photovoltaic elements; and

a light-transmitting layer which is formed of a light-transmitting material and which is provided on the other side of the first plane where the transparent spherical members are provided and which fills at least a space between the first plane and a second plane which is parallel to the first plane and is tangent to the photovoltaic elements.

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10. (Original) A photovoltaic panel according to claim 9, wherein the first plane divides each of the photovoltaic elements into a first portion whose volume is smaller than 50 % of a volume of said each photovoltaic element, and a second portion whose volume is greater than 50 % of the volume, and wherein the light-transmitting layer is provided on the other side of the first plane on which the respective second portions of the photovoltaic elements are located.

11. (Original) A photovoltaic panel according to claim 9, wherein the light-transmitting layer has a shape having two plane surfaces parallel to each other, and wherein one of the two plane surfaces is substantially parallel to the first plane and the other plane surface is substantially parallel to the second plane.

12. (Currently Amended) A method of producing a photovoltaic panel, comprising the steps of:

producing a light-transmitting, photovoltaic-element holding member which holds a plurality of photovoltaic elements along a reference surface, and

forming at least one electrode which is electrically connected to the photovoltaic elements held by the photovoltaic-element holding member,

wherein the step of producing comprises

forming a light-transmitting layer of a light-transmitting material before curing, embedding at least respective portions of the photovoltaic elements in the light-transmitting layer, and

curing the light-transmitting layer in a state in which said at least respective portions of the photovoltaic elements are embedded in the light-transmitting layer, and

wherein the step of embedding comprises
temporarily holding, with a temporarily-holding surface of a temporarily-holding member, the photovoltaic elements, and

moving the temporarily-holding member holding the photovoltaic elements, toward the light-transmitting layer, till the respective portions of the photovoltaic elements are embedded in the light-transmitted layer.

13. (Original) A method according to claim 12, wherein the step of embedding comprises embedding more than 50 % of a volume of each of the photovoltaic elements, in the light-transmitting layer.

14. (Original) A method according to claim 12, wherein the step of embedding comprises embedding more than 50 % of an area of junction of a P-type layer and an N-type layer of each of the photovoltaic elements, in the light-transmitting layer.

15. (Canceled)

16. (Currently Amended) A method ~~according to claim 12, of producing a~~ photovoltaic panel, comprising the steps of:

producing a light-transmitting, photovoltaic-element holding member which holds a plurality of photovoltaic elements along a reference surface, and

forming at least one electrode which is electrically connected to the
photovoltaic elements held by the photovoltaic-element holding member,
wherein the step of producing comprises
forming a light-transmitting layer of a light-transmitting material before curing,
embedding at least respective portions of the photovoltaic elements in the light-
transmitting layer, and
curing the light-transmitting layer in a state in which said at least respective portions
of the photovoltaic elements are embedded in the light-transmitting layer,

wherein the step of curing comprises ~~at least one of heating the light-~~
~~transmitting layer, cooling the light-transmitting layer, and~~ exposing the light-transmitting
layer to light.

Expose to light in a room - photocuring p. 8.

17. (Canceled)

18. (Currently Amended) A method according to claim 17, wherein the step of
temporarily holding comprises temporarily fixing the photovoltaic elements to an adhesive
layer which is formed on the ~~temporarily holding temporarily-holding~~ surface of the
~~temporarily holding temporarily-holding~~ member.

19. (Currently Amended) A method according to claim 17, wherein the step of
temporarily holding comprises temporarily holding, with an arranging member, the
photovoltaic elements on the ~~temporarily holding temporarily-holding~~ surface of the
~~temporarily holding temporarily-holding~~ member.

20. (Currently Amended) A method according to claim 17, wherein the
temporarily-holding member is formed of an elastic material, and wherein the step of
temporarily holding comprises stretching the temporarily-holding member holding the
photovoltaic elements, to change a space between each pair of adjacent photovoltaic elements
of said plurality of photovoltaic elements.

21. (Original) A method according to claim 20, wherein the step of moving the temporarily-holding member comprises moving the temporarily-holding member toward the light-transmitting layer, while preventing contraction of the temporarily-holding member stretched.

22. (Currently Amended) A method according to claim ~~17~~12, wherein the step of temporarily holding comprises

arranging, in a container, the photovoltaic elements into a single layer such that the photovoltaic elements contact with each other, and

pressing the ~~temporarily holding~~ temporarily-holding member against the photovoltaic elements arranged in the single layer in the container.

23. (Currently Amended) A method according to claim ~~17~~12, wherein the step of moving comprises pressing, in a state in which the photovoltaic elements contact the light-transmitting layer, the temporarily-holding member and the light-transmitting layer against each other.

24. (Currently Amended) A method according to claim ~~17~~12, wherein the step of producing further comprises removing, after the step of curing, the ~~temporarily holding~~ temporarily-holding member from the cured light-transmitting layer ~~cured~~.

25. (Original) A method according to claim 12, wherein the step of forming the light-transmitting layer comprises supplying the light-transmitting material to a container and thereby forming the light-transmitting layer.

26. (Original) A method according to claim 12, wherein the step of forming said at least one electrode comprises forming two electrodes on one of opposite sides of the photovoltaic-element holding member.

27. (Original) A method according to claim 12, wherein the step of forming said at least one electrode comprises forming two electrodes on opposite sides of the photovoltaic-element holding member, respectively.

28. (New) A method according to claim 6, wherein the step of preparing the container comprises forming at least a portion of the container of a second light-transmitting material.

29. (New) A photovoltaic panel, comprising:

a plurality of photovoltaic elements each of which includes a P-type layer and an N-type layer;

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a first electrode which is provided on one of opposite sides of a first plane intersecting the photovoltaic elements and which is electrically connected to the respective P-type layers of the photovoltaic elements;

a second electrode which is provided on said one of the opposite sides of the first plane and which is electrically connected to the respective N-type layers of the photovoltaic elements;

a first light-transmitting layer which is formed of a light-transmitting material and which is provided on the other side of the first plane and which fills a space between the first plane and a second plane which is parallel to the first plane and is tangent to the photovoltaic elements; and

a second light-transmitting layer which is provided on one of opposite sides of the second plane that is opposite to the other side thereof on which the first light-transmitting layer is provided, the second light-transmitting layer defining the second plane.

30. (New) A photovoltaic panel according to claim 29, wherein the second light-transmitting layer comprises a rigid, flat member.

Fig. 27 & 28